

Remarks

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the reasons that follow.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented with appropriately defined status identifiers.

Claims 1, 3 and 13 have been amended, claim 12 has been canceled, and new claim 27 has been added. Upon entry of this Amendment, claims 1-11 and 13-27 will remain pending in this application.

Support for the amendments to the claims can be found in the publication of the present application, US 2005/0106204, in, e.g., the following places:

- claim 1 – paragraph [0075] and original claim 12;
- claim 13 – paragraph [0076]; and
- claim 27 – paragraph [0079].

The amendments to claim 3 are grammatical in nature, as are other amendments to claim 1. Because the foregoing amendments do not introduce new matter, entry thereof by the PTO is respectfully requested.

References cited in information disclosure statements (IDSs)

In a prior Office Action mailed on July 25, 2007, the PTO crossed out and did not consider reference C1 (the International Search Report and Written Opinion for PCT/US2004/038135) on the returned copy of the IDS filed on June 9, 2005. In that Action, the PTO did not give a reason as to why it did not consider C1. Further, the PTO did not initial references A60 (US 5,997,517) and B22 (WO 97/10011) on the returned copy of the IDS filed on March 4, 2004. The PTO also did not give any reason as to why it did not initial A60 and B22. Applicants respectfully request that the PTO return a signed-off copy of the IDSs filed on June 9,

2005 and March 4, 2004 acknowledging that the PTO has considered references C1 (the Search Report and Opinion for PCT/US2004/038135), A60 (US 5,997,517) and B22 (WO 97/10011).

Claim rejections under 35 U.S.C. § 112, first paragraph

On pages 3 and 8 of the Action, claims 1-13 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly lacking written description. The PTO alleges that the terms “peptides”, “antisense agents”, and “diazonium diolates” in claim 13 lack written description on the ground that the specification “lack[s] chemical structural information for what they are” (pages 3 and 8). The amendments to claim 13 render the rejection moot with respect to the terms “peptides” and “antisense agents”.

Applicants respectfully submit that the specification sufficiently describes “diazonium diolates”. For example, the specification describes the important chemical and structural characteristics of diazenium diolates: “Diazonium diolate type nitric oxide donors are adducts of nitric oxide with nucleophilic amines ..., and in slightly acidic medium they spontaneously release NO” (paragraph [0078]). In addition, the specification describes three representative examples of diazenium diolates – SSD, MAHMA-NO and DETA-NO ([paragraph 0079]). Therefore, an ordinary artisan would recognize that Applicants are in possession of diazenium diolates.

For the foregoing reasons, Applicants respectfully request withdrawal of the rejection for lack of written description.

Claim objection

Claim 1 is objected to on page 6 for using the word “or” in the Markush group. The amendments to claim 1 render this objection moot.

Claim rejections under 35 U.S.C. § 112, second paragraph

On pages 6-7, claims 1-13 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. First, the PTO objects to the period mark after “(PEG)” in claim 1. The amendments to claim 1 render this rejection moot. Second, the PTO objects to the term “PEG” immediately following “(PEG).” in claim 1. The amendments to claim 1 also render this rejection moot.

Third, the PTO alleges that the term “(PBT)” in claim 1 is indefinite. Applicants respectfully submit that an ordinary artisan reading the claims and specification would understand that the term “(PBT)” means “poly(butylene terephthalate)” and that the term “block-copolymers of PEG with poly(butylene terephthalate) (PBT)” means block-copolymers of PEG with PBT. For example, the specification (paragraphs [0054] to [0056]) and claim 7 describe the block copolymers PEG-PBT-PEG and PBT-PEG-PBT. Thus, the ordinary artisan would understand the term “(PBT)” in claim 1.

Finally, the PTO alleges that the term “EVEROLIMUS” in claim 13 is indefinite on the ground that it is a trademark. The PTO states that this rejection can be overcome by using the compound’s generic name or adding its full name in parenthesis. Applicants respectfully point out that “everolimus” is in fact the compound’s generic name. To clarify that “everolimus” is the compound’s generic name rather than its trademark, Applicants have amended claim 13 to replace the all-capital spelling of the name with its all-lower-case spelling. For further clarity, the term “40-*O*-(2-hydroxy)ethyl-rapamycin” in parenthesis has been added after “everolimus”. An ordinary artisan would understand that the term “40-*O*-(2-hydroxy)ethyl-rapamycin” structurally identifies everolimus.

For the foregoing reasons, Applicants respectfully request all of the rejections for indefiniteness.

Claim rejection under 35 U.S.C. § 102

On page 10, the PTO maintains the rejection of claims 1, 2, 4 and 8-13 under 35 U.S.C. § 102(b) for allegedly being anticipated by US 2002/0094440 to Llanos *et al.* (“Llanos”). Applicants respectfully disagree with this rejection.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. An “inherent characteristic [must] necessarily flow[] from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ 2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (original emphasis). “Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991) (quoting *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981)) (original emphasis).

Applicants respectfully submit that Llanos cannot anticipate any of claims 1-13 because Llanos does not expressly or inherently describe each and every feature of any of these claims. First, Llanos does not expressly or inherently describe a coating comprising a fluorinated polymer AND a biologically beneficial polymer as defined in claim 1, which features are recited directly or indirectly in each of claims 1-13. Second, Llanos does not expressly or inherently describe a biologically beneficial polymer being conjugated to a biologically active agent, which features are also recited directly or indirectly in each of claims 1-13.

According to the PTO, Llanos discloses a coating comprising a “polyfluoro copolymer” containing a fluorinated first moiety and a second moiety “capable of providing toughness or elastomeric properties” (page 10). The PTO asserts that “[t]he second polymer moiety ... is reasonably construed to be a *beneficial polymer*” (page 10, original emphasis), that “there is no requirement in the instant claims that the ‘[] fluorinated polymer’ and the ‘[] biologically beneficial polymer’ be different polymers” (page 11), and that “Solef is reasonably construed to be a biologically beneficial polymer” (page 11).

Contrary to the PTO's assertion, an ordinary artisan reading the present claims and specification would understand that the fluorinated polymer and the biologically beneficial polymer are *different* polymers. For example, none of the members of the Markush group of biologically beneficial polymers in claim 1 is a fluorinated polymer as described in the specification. Even assuming for the sake of argument that the second moiety of Llanos' fluorinated copolymer could be a "biologically beneficial moiety", the second moiety is part of the fluorinated copolymer, not a separate biologically beneficial polymer as claimed in the present application. In addition, even assuming *arguendo* that Solef could be a biologically beneficial polymer, Solef is not a member of the claimed Markush group of biologically beneficial polymers.

Finally, the PTO asserts that Llanos's coating comprising rapamycin reads on the claim language, "wherein the biologically beneficial polymer is a polymeric adduct comprising a biologically active agent," in now canceled claim 12. Claim 1 has been amended to recite that "the biologically beneficial polymer is conjugated to a biologically active agent." Nowhere in Llanos does Llanos describe a bioactive agent being conjugated to a polymer. An ordinary artisan would recognize that a bioactive agent impregnated in a polymeric coating, as disclosed in Llanos, is not a bioactive agent conjugated to a polymer, as recited in the present claims.

Because Llanos does not expressly or inherently describe each and every feature of any of claims 1-13, Llanos cannot anticipate any of these claims. Accordingly, Applicants respectfully request withdrawal of the anticipation rejection over Llanos.

Claim rejection under 35 U.S.C. § 103(a)

On page 12 of the Action, the PTO maintains the rejection of claims 3, 5 and 6 under 35 U.S.C. § 103(a) as allegedly being obvious over Llanos (*supra*) and US 6,756,458 to Kashiwagi *et al.* ("Kashiwagi"). Applicants respectfully disagree with this rejection.

To establish a *prima facie* case of obviousness, the PTO must provide evidence or well-grounded technical reasoning establishing that every feature of a claimed invention was part of

the prior art or otherwise would have been known to an ordinary artisan prior to the time the claimed invention was made.

Applicants respectfully submit that the PTO has not established a *prima facie* case of obviousness against any of claims 3, 5 and 6 because the PTO has not provided evidence or well-grounded technical reasoning establishing that every feature of any of these claims was part of the prior art or otherwise would have been known to an ordinary artisan. For example, the proffered evidence, the combination of Llanos and Kashiwagi, does not teach or suggest (1) a coating comprising a fluorinated polymer and a biologically beneficial polymer as defined in claim 1, and (2) a biologically beneficial polymer being conjugated to a biologically active agent. All of these features are recited indirectly in each of claims 3, 5 and 6.

Because the PTO has not provided evidence or well-grounded technical reasoning establishing that every feature of any of claims 3, 5 and 6 was part of the prior art or otherwise would have been known to an ordinary artisan, the PTO has not established a *prima facie* case of obviousness against any of these claims. Accordingly, Applicants respectfully request withdrawal of the obviousness rejection over Llanos and Kashiwagi.

Additional cited references

On pages 18-23, the PTO states that “[t]he following post-dated art are made of record and relied [*sic*] as being pertinent to applicant’s invention”: (1) US 5,708,044 to Branca; (2) US 6,416,834 to Fuller; (3) US 6,953,560 to Castro *et al.*; (4) US 6,759,129 to Fukushi; (5) US 7,056,550 to Davila *et al.*; (6) US 4,910,276 to Nakamura *et al.*; and (7) EP 0396429 to Cohn. However, the PTO does not indicate whether any of these references is being cited in a claim rejection for anticipation or obviousness.

Applicants respectfully submit that none of these additional references can anticipate or render obvious any of claims 1-13 because none of these references, either alone or in combination, describe or suggest: (1) a coating comprising a fluorinated polymer and a biologically beneficial polymer as defined in claim 1, and (2) a biologically beneficial polymer

being conjugated to a biologically active agent. All of these features are recited, directly or indirectly, in each of the claims under consideration.

Claim rejections for double patenting

On pages 6, 15 and 17, the PTO maintains the obviousness-type double patenting rejections over (1) US Pat. 7,169,404 in view of Llanos and Kashiwagi and (2) US Appl. 11/641,250 in view of Llanos because the filed terminal disclaimers referring to US 7,169,404 and US 11/641,250 have not yet been approved. Once these terminal disclaimers are approved, these double patenting rejections will become moot.

In addition, the PTO asserts that “Applicant should review all subject matter [claimed in issued patents and co-pending applications] considered the same or similar [to that claimed in the present application], and submit the appropriate Terminal Disclaimer(s)” (page 23). The PTO specifically cites three additional references – U.S. Pat. Nos. 6,908,624; 7,186,789 and 7,214,759.

Applicants respectfully note that is the PTO’s, not Applicants’, responsibility to examine the present application and to set forth claim rejections if appropriate. It is improper for the PTO to compel Applicants to act on “claim rejections” that have never been made.

Regarding US Pat. 6,908,624, Applicants respectfully submit that the claims of the present application are patentably distinct from the claims of US ‘624 because, e.g., the ‘624 claims do not describe a biologically beneficial polymer being conjugated to a biologically active agent, as directly or indirectly recited in every claim under consideration. The ‘624 claims do not describe that the “active ingredient” is conjugated to a biologically beneficial polymer. Accordingly, Applicants respectfully request withdrawal of the apparent double patenting rejection over US 6,908,624.

With respect to the apparent obviousness-type double patenting rejections over US Pat. Nos. 7,186,789 and 7,214,759, Applicants have filed terminal disclaimers referring to these two patent references with this Reply. Thus, these double patenting rejections have become moot.

Conclusion

The present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 07-1850. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 07-1850. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorize payment of any such extensions fees to Deposit Account No. 07-1850.

Respectfully submitted,

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